

What is claimed is:

1. A laminated load restraining strip for use in securing cargo within a transport container, which cargo is subject to shifting forces during transport, said load restraint strip comprising:

5

a flexible substrate strip having a first side and a second side;

a first layer of adhesive coextensively extending along and coating said first side of said substrate strip and having a first side of said first layer of adhesive in adhering contact with said first side of said substrate strip;

10

a second layer of adhesive coextensively extending along and coating said second side of said substrate strip and having a first side of said second layer of adhesive in adhering contact with said second side of said substrate strip;

15

a first layer of reinforcement strands bound to said substrate strip by said first layer of adhesive with a first side of said first layer of reinforcement strands adhered to said second side of said first layer of adhesive;

20

a second layer of reinforcement strands bound to said substrate strip by said second layer of adhesive with a first side of said second layer of reinforcement strands adhered to said second side of said second layer of adhesive;

**a third layer of adhesive extending along and coating at least a portion of
a second side of said second layer of reinforcement strands; and**

**a release paper extending coextensively with and releasably adhered to
5 said third layer of adhesive applied to said second side of said second layer of
reinforcement strands, wherein said release paper may be removed from said
third layer of adhesive on site and said load restraining strip releasably affixed to
a side wall surface of a cargo transport container such that said load restraining
strip may be used as a flexible securement element to secure cargo within a
10 transport container.**

**2. A laminated load restraining strip for use in securing cargo within a
transport container as defined in claim 1 wherein said substrate strip comprises:**

**15 a pliant and porous material such that said first and second layer of
adhesives at least partially interacts for adhering cooperation between said first
and second layer of adhesive.**

**3. A laminated load restraining strip for use in securing cargo within a
20 transport container as defined in claim 1 wherein said substrate strip comprises:**

**a pliant and non-porous material wherein said first and second layer of
adhesives adhere to said substrate with sufficient shear force to operaly transfer
restraining force between said first and second adhesive layers of said laminated**

load restraining strip.

4. A laminated load restraining strip for use in securing cargo within a transport container as defined in claim 1 wherein said substrate comprises:

5

a spun bonded polyester substrate.

5. A laminated load restraining strip for use in securing cargo within a transport container as defined in claim 1 wherein said first and second layer of

10 **reinforcement comprises:**

a plurality of reinforcement strands bound to said first and second layers of adhesive respectively in a parallel array.

15 **6. A laminated load restraining strip for use in securing cargo within a transport container as defined in claim 5 wherein:**

each of said strands of reinforcement comprises a plurality of finer denier fibers of reinforcing material.

20

7. A laminated load restraining strip for use in securing cargo within a transport container as defined in claim 6, wherein said finer denier fibers are composed of :

a polyester.

8. A laminated load restraining strip for use in securing cargo within a transport container as defined in claim 6, wherein said finer denier fibers are
5 composed of :

a polypropylene.

9. A laminated load restraining strip for use in securing cargo within a
10 transport container as defined in claim 6, wherein said finer denier fibers are composed of :

a polyethtlene.

- 15 10. A laminated load restraining strip for use in securing cargo within a transport container as defined in claim 6, wherein said finer denier fibers are composed of :

a polyolefin.

20

11. A laminated load restraining strip for use in securing cargo within a transport container as defined in claim 6, wherein said finer denier fibers are composed of :

a glass fiber.

12. A laminated load restraining strip for use in securing cargo within a transport container as defined in claim 6, wherein said finer denier fibers are
5 composed of :

an aramid.

13. A laminated load restraining strip for use in securing cargo within a
10 transport container as defined in claim 6, wherein said finer denier fibers are composed of :

carbon fibers.

15 14. A laminated load restraining strip for use in securing cargo within a transport container as defined in claim 6, wherein said finer denier fibers are composed of :

kevlar fibers.

20

15. A laminated load restraining strip for use in securing cargo within a transport container as defined in claim 6, wherein said finer denier fibers are composed of :

a combination of at least two different fibers selected from the group consisting of a polyester, polypropylene, polyethylene, polyolefin, glass fiber, aramid, carbon fiber and kevlar.

- 5 **16. A laminated load restraining strip for use in securing cargo within a transport container as defined in claim 1, wherein said third layer of adhesive comprises:**

a substrate material;

10

a first course of adhesive covering a first side of said substrate material and adhered to said second side of said second layer of reinforcement strands; and

- 15 **a second course of adhesive covering a second side of said substrate material and being operable for adhering contact with an interior surface of a cargo transport container.**

- 17. A laminated load restraining strip for use in securing cargo within a**
20 **transport container as defined in claim 16, wherein said substrate comprises:**

a strip of mylar material.

- 18. A laminated load restraining strip for use in securing cargo within a**

transport container as defined in claim 16, wherein: said

**said first course of adhesive of said third layer of adhesive is thicker than
said second course of adhesive of said third layer of adhesive.**

5

**19. A method for securing cargo within a transport container, which cargo is
subject to shifting forces, using a laminated load restraint system, said method
comprising the steps of:**

10 **removing a first and a second laminated load restraining strip of material,
having substantially equal lengths, from a reel of laminated strip material
wherein each of said laminated strips includes a substrate layer, a first layer of
adhesive coating a first side of said substrate strip, a second layer of adhesive
coating a second side of said substrate strip, a first layer of reinforcement
15 strands bound to said first layer of adhesive and a second layer of reinforcement
strands bound to said second layer of adhesive and a third layer of adhesive
bound to an outer surface of said second layer of reinforcing strands, said first
and second laminated load restraining strips being operable for attachment at
one end to an interior surface of a transport container and the other end to
20 extend at least partially across an unconfined end of a load to be restrained;**

**peeling a release paper from said first and second laminated load
restraining strips at one of the ends thereof;**

applying said first and second laminated load restraining strips to
opposing interior surfaces of the transport container so that said first and second
laminated load restraining strips extend across the transport container enough to
be overlapped;

5

pressing the adhesive of said first and second load restraining strips
against the opposing interior surfaces of the transport container;

loading cargo into the transport container;

10

overlapping the ends of said first and second laminated load restraining
strips that extend within the transport container;

drawing said first and second laminated load restraining strips taut

15 around the rear of the cargo at the overlapped location; and

securing said first laminated load restraining strip to said second load
restraining strip at the overlapped portion wherein the shear strength of said
first and second adhesive layers operably transfer axial loads between said first
and second reinforcing strips and to the interior surface of said transport
20 container through said third adhesive layer, thereby forming a secure laminated
load restraining system.

20. A method for securing cargo within a transport container, which cargo is

subject to shifting forces, using a laminated load restraint system as defined in claim 19, said method further comprising the steps of:

forming said third layer of adhesive with a substrate having a length less
5 than the length of either of said first and second laminated adhesive strips, a first course of adhesive on said substrate adjacent to said second layer of reinforcement strands and a second course of adhesive on an outer surface of said substrate for attachment to an interior surface of said transport container.

10 21. A method for securing cargo within a transport container, which cargo is subject to shifting forces, using a laminated load restraint system as defined in claim 20, said method further comprising the step of:

forming the inner course of adhesive adjacent to said second layer of
15 reinforcement strands with a thickness greater than the thickness of the adhesive course on the outer surface of the substrate.